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The Contribution and Influence of Pre-Military Activity on Its Graduates

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Abstract

The article will address the contribution of the pre-military activity in Israel in the high schools to the success of its graduates, while examining the influence of this activity on the motivation and success of its graduates in the continuation of post-secondary school technological studies. This article will discuss the unique characteristics of this activity in Israel, with its integration into the educational system, including the synergy between, on the one hand, the military and, on the other hand, the educational system and the Israeli industry.

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Keyword: Military service, Pre-military activity, post-secondary school studies, technological education.

1. Introduction

Education lies at the basis of change that enables growth in the technology-rich global world in which we live (Levin, 1995).

Schools in Israel and around the world are required to exist in an intensive period of powerful changes. Economic and social changes, such as those that are occurring now and that are expected to happen to us in the future, have

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implications on the re-design of the school, including its objectives and the nature of the educational processes that occur in it (Anderson & Maninger, 2007; Avidov-Ungar & Eshet-Alkalai, 2011).

The technological developments we have seen in recent years, in the countries of the West, including in Israel, present the decision makers in the government organizations with challenges in the creation of professional human capital in both the traditional and the modern industries (Lotan, 2007).

The development of new professions and the elimination of traditional professions is a clear characteristic of the period in which we live. Moreover, in light of the characteristics of the period, the average employee will change his career a number of times during his life (Toshav Eichner, 2009). This reality requires of the potential employee not only skills and expertise but also flexibility and adaptability and even creates collaborations between employers and the governments, out of the desire to provide a solution for this reality (Lotan, 2007). The Israeli industry and the Israel Defense Force, which constitute the large consumers of technological manpower in the Israeli economy, are challenged as a result by these processes and changes and are required to constantly present solutions on these issues (Yanko, 2013). In the State of Israel, as a result of the security reality with which the State has coped from the day it was established, there is a compulsory draft that obligates young people aged eighteen and above to be drafted into the military service (Knesset, 2014). In the context of this draft, the young people are channeled into different frameworks, with emphasis on the combat framework and the technological framework, when the number of people serving in them is relatively large (Tzadok, 2009). The technological framework in the Israel Defense Force is defined as one of the critical frameworks in strategic terms and bases its power on advanced technologies (Tzadok, 2009). The Israel Defense Force, as a client of the Israeli educational system, is significantly challenged by the decrease in the number of people who are studying in the technological programs (Vargen & Natan, 2008). This decrease influences its ability to fulfill its purpose.

In the framework of the manpower challenge it faces, the Technology and Logistics Department of the Israel Defense Force holds extensive pre-military activity in the framework of which the Department works to increase the motivation of young people to choose technological studies and technological service (Tzadok, 2009; Yanko, 2013).

The pre - military program includes activities whose purpose are

to prepare the young people for a full and significant military service, and provide them preparation for the meeting with military life. (Ministry of Education, 2014).

The pre-military activity constitutes a solution for these challenges, and at its basis is the empowerment of the learners, while leveraging their abilities both for post-secondary school studies and for significant technological service as a means for their potential integration as a quality workforce in the Israeli industry.

2. Paper Rational

The professionalism of the technological soldier in the field is critical to the success of the Israel Defense Forces in the field of battle, when dealing with the extreme challenges placed at its doorstep.

The entrance of new technologically advanced weapons obligates the Israel Defense Forces to find creative solutions in the manpower performing mandatory military service, as a result of the decline in the number and quality of the learners in the technological program in the secondary school educational system.

The research study will develop insights into the increase of the motivation for the post-secondary school technological studies and the influence of the pre-military education activity on the graduates' success.

The fulfillment of the research insights will enable the prevention, ahead of time, of failures and obstacles with the formation of tools for the improvement of the process.

3. Gap in knowledge

This research study constitutes an innovation in that it enables a look at the contribution of the pre-military programs on the one hand to the graduate and on the other hand, to the Israel Defense Forces and the State of Israel, until this date there has not been any research undertaken in this area.

4. Paper theoretical foundation and related literature

"He who cares for the future in days sows seeds,
He who cares for the future in years plants trees,
He who cares for the future in generations educates people."
Janusz Korczak

The success of the Israeli industry is largely a product of the educational system and of the investment in research and development (Lotan, 2007). The main objective of the educational system is to inculcate tools for life in its graduates so that they can handle the challenges of the future (Lotan, 2007).
Many countries in the world have considerably increased their investments in the training of personnel and the reinforcement of the learning frameworks and the technological vocational training frameworks, since they understand that the main engine for the achievement of the national objectives is both vocational training and technological education (Lotan, 2007). In the State of Israel, in contrast, there is the reverse trend. Namely, in the past decades there has been a decline in the number of people studying in the technological programs, including a certain degree of erosion in the image of vocational technological education (Vurgan &Nathan 2008).
This decrease derives primarily from the cuts in the technological education budget, the closing of programs and technological schools, and so on (Lotan, 2007). In recent years, there is an increase in the number of learners in technological education, but this increase does not provide a full solution to the different needs.
Technological vocational education in the State of Israel is directly related to the main issues in the social-economic policy, and provides a response to main issues. Including the fact that it makes a necessary contribution to the needs of the economy, enables a feeling of efficacy and fulfillment of the personal potential, and serves as a bridge to a life of work and productive activity (Yanko, 2013). Approximately 52% of all the students in the high schools studied in vocational technological education. There has been a moderate decline in the percentage until today, when the percentage of students studying in the technological programs is about 37% of all the learners in the educational system (Vurgan &Nathan 2008). This process has a profound influence on the Israeli economy and on the Israel Defense Forces (Yanko, 2013). The Israel Defense Forces holds extensive pre-military activities in dozens of different schools in diverse models of different intensities. In this framework, the Israel Defense Forces turns to different segments in the population and holds pre-military education activities for about 7,000 students in the country (Tsadok, 2009; Yanko, 2013). The pre-military activities in the Israel Defense Forces in general and in the department of Technology and Logistics in particular constitute a significant quantitative and qualitative resource. This process is created so as to bridge the gaps in technological personnel in the Israel Defense Forces, while strengthening the motivation for the military service (Tsadok, 2009; Yanko, 2013).
The pre-military programs have broadened significantly over the years and constitute today a significant part in the technological manpower in the Israel Defense Forces (Tsadok, 2009; Yanko, 2013).

5. Methodology

The mixed method has become legitimate in recent years (Camic, Rhodes, & Yardley, 2003).
In light of the fact that it constitutes the maximal level at which the researcher can integrate a research method both from the qualitative method and from the quantitative method throughout the different stages of the case and enables to learn about social phenomena from two different viewpoints.
In addition, the mixed method research enables completion, development, extension, and verification that do not exist in qualitative or quantitative research studies (Teddlie & Tashakkori, 2003).
In this research study, the researcher will seek to examine the contribution of the pre-military activity to its graduates, so as to learn about the contribution of the pre-military activity.
To obtain an overall picture of the topic, I will use the integrated research method. This research method enables the integration of quantitative and qualitative research instruments so as to allow in-depth learning of perceptions and positions of the research population (Creswell, 1999).
Quantitative research fundamentally maintains that the best way to understand phenomena is through a broad and

numerically measurable sample through which it is possible to understand the research picture and produce laws and rules (Birenboim, 1993). The framework of quantitative research consists of a continuum beginning with the choice of the research topic and ending with the confirmation or refutation of the research hypothesis. In quantitative research, the research design is structured, and the variables are measurable. The sample is large, and the categories are prepared ahead of time (Shkedi, 2003) In addition, it is possible through the research instruments to collect information within a relatively short period of time (Berg, 2007). The qualitative approach in the social sciences sees the research goal to be the understanding of phenomena through reference to the implicit aspects of human behavior. Qualitative research, unlike quantitative research, does not begin with a theory and hypotheses formulated ahead of time. In addition, in this type of research the main instrument of the research is the researcher himself (Tzabar Ben Yehoshua, 1990).

Qualitative assessment tends to be based on interviews and on observations. It tends to rely on in-depth recognition of processes and events. This framework uses the stories and words of the research respondents to understand their experiences (Shkedi, 2003) and enables the researcher to study and investigate a topic in an in-depth and rich manner, even when the group is relatively small (Given, 2006).

In addition, the qualitative research method is open and depends greatly on the researcher's style (Allpert, 2001; Givton, 2001) .In-depth interviews will constitute an additional tool in this research study, from the three main forms of the interview – open ethnographic interview, structured standard interview, and guided and focused interview (Tsabar Ben Yehoshua, 1990). The present research study will use an open.

In-depth interviews that will be held with a small number of students to ethnographic interview examine the research objectives. Interviews as a tool enable the researcher to add questions through the performance of the interviews, and thus to obtain a broader picture.

However, it is important to remember the limitations that derive from this instrument, including the researcher's influence on the information produced from the interview, because of the interaction between him and the interviewees and since he is a person with directions and attitudes of his own (Paton, 1990).

There are other disadvantages that derive from this type of interview, which has "problems of validity and reliability, primarily because of the influence of the researcher-interviewer's personality, abilities, and experience" (Tsabar Ben Yehoshua, 1990). The questions in the interview will be open questions, so as to obtain the spectrum of opinions, approaches, and emotions without the researcher's direction (Dushnik & Tsabar Ben Yehoshua, 2001).

In recent years, the awareness of the advantages of the integration of quantitative research methods and qualitative research methods has increased (Bradt, Burns, & Creswell, 2013; Bryman, 1988; Frels & Onwuegbuzie, 2013).

To learn about and obtain a comprehensive and full picture of the topic, the two research methods were combined into the mixed method for the collection and analysis of data so that the data can be understood as a whole.

In the framework of the quantitative method, data will be collected using attitudes questionnaires among a relatively large sample of students who learn in the pre-military programs. In the framework of the qualitative method, in-depth interviews will be conducted with a representative sample from the same learners (Camic, Rhodes & Yardley, 2003). The integration of the quantitative and qualitative research instruments and the use of the instruments for the collection and/or analysis of data concurrently or sequentially will enable in-depth learning about the perceptions and positions of the graduates of the pre-military education programs (Creswell, 1999).

The essential difference between the two methods is expressed in the goals and in the method of the collection of the data and the products. In quantitative research, the main goal is the measurement of the phenomenon for the purpose of verification and validation of hypotheses, while the qualitative method focuses on the description and understanding of the phenomenon, through the learning of the processes in the context in which they occur (Creswell, 2011).

6. Research Objective

In the framework of the research study, the contribution of the pre-military education activity will be examined in the following ways:

- Examination of the influence of the pre-military education activity on the motivation of the graduates for the continuation of the post-secondary technological studies.

- Examination of the influence of the pre-military education activity on the success of the graduates in the post-secondary technological studies.

7. Research Question

What is the contribution of the pre-military education activity in the high schools to the success of the graduate in post-secondary technological studies?

8. Research Instruments

In the framework of the research study, the researcher will use both qualitative research instruments and quantitative research instruments. The analysis of the data collected in the qualitative research method is intended to shed light on the findings obtained in the quantitative part so as to support them or to cast doubt on them, while analysis of the data collected according to the qualitative method is intended to contribute to the understanding of the process.
In the framework of the research study, an instrument will be constructed for the evaluation of the pre-military activity from the field. In the framework of this instrument, an examination will be performed of the achievements and performances of the students in the school and their achievements in the pre-military program and the contribution of this activity to their scholastic achievements.
In the framework of the present research study, the following activities will be performed:

- Distribution of attitudes questionnaires to about one hundred students who are graduates of pre-military activity in the twelfth grade ,This will enable the researcher to research their motivation for higher technological studies and their perception regarding the contribution of the program to them.
- Distribution of attitudes questionnaires to about one hundred students who are graduates of higher studies before induction into the Israel Defense Force.
  This will allow the researcher review their perception of the contribution of the program to their motivation and their success in the higher technological studies.
- In-depth interviews with fifteen graduates of pre-military education according to the research goals so as to examine the reasons for these positions.

The questions in the interview will be open questions, so as to obtain the range of opinions without the researcher's direction (Dushnik & Tsabar Ben Yehoshua, 2001). In the first stage, the analysis of the data will be quantitative statistical, which will enable the generalization from the research sample to the overall population. In the second stage, the analysis will be qualitative, so as to focus on the main points that arise in the in-depth interviews.

9. Research Population

The research population consists of 100 twelfth grade students, aged seventeen and eighteen, boys and girls, who study in the framework of the pre-military education programs in different technological/vocational schools in the State of Israel supported by the Department of Technology and Logistics.
In addition to this population, a population will be chosen that is of identical composition and that has completed their post-secondary studies. The entire population will be included in the quantitative and qualitative research. This will allow the focus on the gender differences in the framework of the pre-military programs.
In the framework of the research study, teachers who teach in the schools where the pre-military programs operate will be interviewed, so as to focus on the contribution of this activity to the individual.

10. Summary

The technological framework in the Israel Defense Forces constitutes a significant base and is defined as one of the most critical frameworks in strategic terms and in the scope of the manpower serving in it (Tzadok, 2009).
As a derivative of the technological needs, the Israel Defense Forces emphasizes and strengthens the importance of the vocational training, provided before the military service, through the investment of considerable financial and

human resources for the preservation and extension of technological education, although this field is not found under its responsibility (Tsadok, 2009).

The lack of fit between the technological needs required by the Israel Defense Forces and the inadequate number of the graduates of technological education has a significant influence and forces the IDF to train significant numbers of graduates from the theoretical studies program for technological vocations during their term of military service (Tsadok, 2009).

This research study will enable the researcher and the Israel Defense Forces to focus on the contribution of the pre-military activity, while using the research results as a tool of the improvement and betterment of the existing situation. The results of the research study will add knowledge about the possibilities embodied in the different preliminary programs to the professional literature and will enable these insights to be duplicated in other fields of knowledge.

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